

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

first storing means for storing image data;

judging means for dividing said image data stored
5 in said first storing means into a plurality of blocks
and making judgment upon whether all pixels are white
in accordance with each of said divided blocks;

rotation processing means for performing rotation
processing of image data of a block when it is
10 determined that not all pixels in said block are white
by said judging means;

controlling means for controlling to omit rotation
processing of image data of a block when it is
determined that all pixels are white in said block by
15 said judging means;

compressing means for compressing image data of
a block which skips rotation processing by said
controlling means or image data of a block subjected to
rotation processing by said rotation processing means
20 and determining resulting data as code data; and

second storing means for storing said code data
compressed by said compressing means.

2. The image forming apparatus according to
claim 1, wherein said first storing means and said
25 second storing means are provided for a page memory.

3. The image forming apparatus according to
claim 1, wherein said judging means divides image data

into blocks in units of a plurality of lines in said image data.

4. The image forming apparatus according to claim 1, wherein said judging means divides image data
5 into a plurality of blocks in units of 32-bit lines in said image data.

5. The image forming apparatus according to claim 1, wherein said rotation processing means carries out rotation processing in units of one cell with n
10 bits $\times n$ bits constituting a block being determined as one cell.

6. The image forming apparatus according to claim 1, wherein said rotation processing means performs rotation processing in units of one cell with
15 32 bits \times 32 bits constituting a block being determined as one cell.

7. The image forming apparatus according to claim 1, wherein said rotation processing means carries out rotation processing of 270 degrees in the clockwise
20 direction in units of one cell with n bits $\times n$ bits constituting a block being determined as one cell.

8. The image forming apparatus according to claim 1, wherein said rotation processing means performs rotation processing of 270 degrees in the
25 clockwise direction in units of one cell with 32 bits \times 32 bits constituting a block being determined as one cell.

9. The image forming apparatus according to claim 1, wherein said controlling means is a controller for controlling a page memory to which said first storing means and said second storing means are provided.

10. The image forming apparatus according to claim 1, wherein said compressing means performs compression using a Modified Modified READ Code.

11. An image forming apparatus comprising:

first storing means for storing image data;

judging means for dividing said image data stored in said first storing means into a plurality of blocks and making judgment upon whether all pixels are white in accordance with each of said divided blocks;

rotation processing means for performing rotation processing of image data of a block when it is determined that not all pixels in said block are white by said judging means;

second storing means for storing image data of a block subjected to rotation processing by said rotation processing means;

controlling means for controlling to omit rotation processing of image data of a block when it is determined that all pixels in said block are white by said judging means;

compressing means for compressing image data of a block which skips rotation processing by said

controlling means or image data of a block stored in
said second storing means and determining resulting
data as code data; and

third storing means for storing said code data
5 compressed by said compressing means.

12. The image forming apparatus according to
claim 11, wherein said first storing means, said second
storing means and said third storing means are provided
for a page memory.

10 13. An image forming apparatus which has
compressing means for compressing image data and forms
an image, said image forming apparatus comprising:

first storing means for storing image data;

judging means for dividing image data stored in
15 said first storing means into a plurality of blocks,
performing bit retrieval in accordance with each of
said divided blocks, and making judgment upon whether
all pixels of each of said blocks are white;

rotation processing means for performing rotation
20 processing of image data of a block which is determined
that not all pixels thereof are white by said judging
means;

second storing means for storing image data of a
block subjected to rotation processing by said rotation
25 processing means;

first controlling means for performing bit
retrieval of image data of a block stored in said

second storing means, compressing said image data by
said compressing means, and determining resulting data
as code data;

5 second controlling means for compressing by said
compressing means image data of a block determined that
all pixels thereof are white by said judging means, and
determining resulting data as code data; and

10 third storing means for storing said code data
controlled and compressed by said first controlling
means or said code data controlled and compressed by
said second controlling means.

14. The image forming apparatus according to
claim 13, wherein said first storing means, said second
storing means and said third storing means are provided
15 for a page memory.

15. The image forming apparatus according to
claim 13, wherein said first controlling means and
said second controlling means are controllers for
controlling a page memory to which said first storing
20 means, said second controlling means and said third
storing means are provided.